

BEFORE THE BOARD OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RESOURCES STATE OF UTAH

OIL, GAS & MINING

In the matter of the request for agency action of pioneer natural resources usa, inc. for an order partially vacating the board's orders in cause nos. 220-04 and 220-05 and instead establishing temporary 320 acre drilling and spacing units for the production of gas (including but not limited to coalbed methane) from the blackhawk formation, comprised of the w½ of section 16 and the e½ of section 18, respectively, of township 12 south, range 10 east, slm, carbon county, utah, and authorizing the drilling of a horizontal well in each such unit so established

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

Docket No. 2005-006

Cause No. 220-06

This cause came on for hearing before the Utah Board of Oil, Gas and Mining (the "Board") on Wednesday, April 27, 2005, at approximately 4:20 p.m. The following Board members were present and participated at the hearing: Chairman J. James Peacock, Robert J. Bayer, Douglas E. Johnson, Kent R. Petersen and Jake Y. Harouny. Board members Samuel C. Quigley and Jean Semborski were unable to attend. The Board was represented by Michael S. Johnson, Esq. and Stephen E. Schwendiman, Esq., Assistant Attorneys General.

Testifying on behalf of Petitioner Pioneer Natural Resources USA, Inc. ("Pioneer") were Betty C. Brownson – Staff Landman, George L. Hampton, III – Contract Consulting Geologist, and Paul R. Onsager, Reservoir Engineering Manager–Western Division.

Frederick M. MacDonald, Esq., of and for Pruitt Gushee, a Professional Corporation, appeared as attorney for Pioneer.

Testifying on behalf of the Division of Oil, Gas and Mining (the "Division") was John R. Baza, Associate Director – Oil and Gas. Steven F. Alder, Esq., Assistant Attorney General, appeared as attorney on behalf of the Division.

During the hearing, Pioneer and the Division stipulated that, if the Board were to grant its Request for Agency Action, Pioneer would, after one year from the respective dates of completion of the proposed horizontal wells, report back to the Board and present production data acquired from said wells in order to determine if the requested 320-acre drilling and spacing units should be vacated, modified or reaffirmed. With this stipulation, the Division expressed its support for the granting of the Request for Agency Action at the conclusion of its presentation.

At the conclusion of Pioneer's and the Division's presentations, Robert Henricks, Acting Chief, Branch of Fluid Minerals, Utah State Office, Bureau of Land Management ("BLM"), expressed the BLM's support for the granting of the Request for Agency Action.

No other party filed a response to Pioneer's Request for Agency Action and no other party appeared or participated at the hearing.

The Board, having considered the testimony presented and the exhibits received into evidence at the hearing, being fully advised, and for good cause, hereby makes the following findings of fact, conclusions of law and order.

FINDINGS OF FACT

- 1. Pioneer is a Delaware corporation in good standing, with its principal places of business in Irving, Texas and Denver, Colorado. Pioneer is duly qualified to conduct business in the State of Utah and is fully bonded with all appropriate Federal and State agencies.
- 2. By Order entered April 30, 2002 in Cause No. 220-04 (the "2002 Order"), the Board established 160-acre (or substantial equivalent) drilling and spacing units, each comprised of a governmental quarter section or lots and quarter-quarter sections substantially comprising the same, for the production of gas (including coalbed methane) from the Blackhawk formation, defined as follows:

the stratigraphic equivalent of 4,020 feet below the surface of the earth down to 5,300 feet as measured in the Cockrell Oil 1210-0806 #1 (a/k/a Anadarko Federal 6-8) well located in the SE½NW¼ of Section 8, Township 12 South, Range 10 East, SLM, Carbon County, Utah

(the "Spaced Formation"), for the W½ of Section 16 and the E½ of Section 18, Township 12 South, Range 10 East, SLM (the "Subject Lands"), among other lands comprising what is commonly known as the Castlegate coalbed methane field, and ruled only one well on

each unit producing in said interval would be allowed. The Board further ordered that the permitted well for each such unit shall be located no closer than 660 feet from the outer boundary of said unit and no closer than 1,320 feet from other wells completed and producing from said formation unless otherwise permitted by administrative action approved by the Division in compliance with Utah Admin. Code Rule R649-3-3.

- 3. By Order entered May 24, 2004 in Cause No. 220-05 (the "2004 Order"), the Board modified the 2002 Order to allow the drilling of a second well in the drilling unit comprised of the NW¼ of subject Section 16 for dewatering and producing gas (including but not limited to, coalbed methane) from the Spaced Formation; provided, however, that said well shall be located no closer than 660 feet from the drilling unit line with not less then 920 feet between wells producing from the Spaced Formation. Administrative approval may be granted for an exception well location for topographic, environmental and archaeological considerations and when "no surface occupancy" stipulations imposed by the landowners (lessors) prohibit drilling at a legal location, without the necessity of a full hearing before the Board.
- 4. The gas underlying the W½ of subject Section 16 is owned by the State of Utah and administered by the Utah School and Institutional Trust Lands Administration. The lands are subject to State Oil, Gas and Hydrocarbon Lease ML-44443, under which

Pioneer is the sole lessee. Leasehold ownership is uniform for the entire $W^{1/2}$ of subject Section 16.

- 5. The gas underlying the NE¼, N½SE¼ and SE¼SE¼ of subject Section 18 is owned in fee and subject to one lease under which Pioneer is sole lessee. The gas underlying the SW¼SE¼ of subject Section 18 is owned by the United States and is administered by the BLM. Those lands are subject to United States Oil and Gas Lease UTU-77283 under which Pioneer is the sole lessee. Leasehold ownership of these two leases is uniform as to the respective Subject Lands covered thereby.
- 6. Pioneer's predecessors in title drilled several vertical wells in the Castlegate field which have been completed and produce coalbed methane from the Spaced Formation, but said wells have not produced sufficient quantities, in relation to the water produced and in light of the reservoir pressures measured, for economic recovery of the estimated reserves in place. Among the primary factors apparently contributing to this lack of success are the low permeability of the coals within the Spaced Formation and the probability that the fracturing of the sandstones, in addition to the targeted coal seams, of the Spaced Formation has occurred, thereby increasing the amount of water which must be produced before optimum desorbtion of the methane from the coals can occur.
- 7. The Aberdeen and Kenilworth coal seams, designated by Pioneer as to the "A1" and "K2" zones in its exhibits and testimony, appear thick and continuous, and with

an approximate 9° dip to the north, across the Subject Lands and therefore make an attractive target for a horizontal well lateral.

- 8. The orientation of natural fractures of the Spaced Formation appears to be northwesterly-westerly across the Subject Lands. There is a greater possibility that more of these fractures would be encountered by positioning horizontal laterals perpendicular or slightly oblique to such orientation.
- 9. Horizontal laterals should not require stimulation and therefore the risk of fracturing sandstones adjacent to the A1 and K2 seams and introducing additional water that otherwise has to be produced will be minimal.
- 10. Pioneer is proposing, on a pilot basis, the drilling of two horizontal wells as follows:

Well	Surface Location	Bottom Hole/ <u>Lateral Terminus</u>
Jensen 2-18 Well	Sec. 18: NE ¹ / ₄ NE ¹ / ₄ (660' FNL/660' FEL)	Sec. 18: NW ¹ / ₄ SE ¹ / ₄ (3,550' FNL/1,304' FEL)
State 11-16 Well (re-entry)	Sec. 16: NW ¹ / ₄ NW ¹ / ₄ (550' FNL/500' FWL)	Sec. 16: NW 1/4 SW 1/4 (3,440' FNL/1,304' FWL)

The State 11-16 well will have two laterals, one targeting the A1 seam and the other targeting the K2 seam, as reflected on Pioneer's Exhibit "O". The Jensen 2-18 well is to have one lateral, targeting the K2 seam only due to the proximity of the A1 seam to the

Aberdeen sandstones in the subject Section 18 lands, as reflected on Pioneer's Exhibit "N". Without further Board action, these laterals would cross over certain boundaries of the drilling and spacing units established for the Subject Lands under the 2002 Order.

11. As part of the pilot project, Pioneer additionally is proposing to convert the following two wells to observation wells in order to monitor the pressure draw down of the horizontal wells described in Paragraph 10 above:

Well	Location
Huber-State 4-16	Sec. 16: SE ¹ / ₄ NW ¹ / ₄ (1,960' FNL/2,140' FWL)
Huber-Jensen 1-18	Sec. 18: NE ¹ / ₄ SE ¹ / ₄ (1,320' FSL/855' FEL)

Although the Huber-State 4-16 well is currently producing from the Spaced Formation, it is marginally economic and, based on the factors outlined above, is expected to become uneconomic shortly. The Huber-Jensen 1-18 well has not been completed. In the event its Request is granted, Pioneer has agreed that neither well will thereafter produce from the Spaced Formation without further approval of the Board.

12. Based on their proposed locations and termini, and based on the technical data provided by Pioneer, it appears the proposed horizontal wells should efficiently and economically drain not more than 320 acres.

- 13. A copy of the Request for Agency Action was mailed, certified mail-return receipt, to all royalty, overriding royalty and working interest owners within the entirety of subject Sections 16 and 18 at their last addresses disclosed by the appropriate Federal, State and County realty records.
- 14. Notice of the filing of Pioneer's Request for Agency Action and of the hearing thereon was duly published in the Salt Lake Tribune, Deseret Morning News and Price Sun-Advocate.
- 15. The vote of the Board members present in the hearing and in this cause was unanimous in favor of granting the Request for Agency Action.

CONCLUSIONS OF LAW

- 1. Due and regular notice of the time, place and purpose of the hearing was properly given to all parties whose legally protected interests are affected by the Request for Agency Action in the form and manner as required by law and the rules and regulations of the Board and Division.
- 2. The Board has jurisdiction over all matter covered by the Request for Agency Action and all interested parties therein, and has the power and authority to render the order herein set forth pursuant to Utah Code Ann. §§ 40-6-5(3)(b) and 40-6-6(6).
- 3. The drilling of the horizontal wells as proposed by Pioneer on a pilot basis is just and reasonable under the circumstances.

- 4. The conversion of the Huber-State 4-16 well to an observation well is just and reasonable under the circumstances and will not constitute waste. The completion of the Huber-Jensen 1-18 well as an observation well is also just and reasonable under the circumstances.
- 5. Partial vacation of the 2002 and 2004 Orders as to the Subject Lands and the creation in lieu thereof of temporary drilling and spacing units for the Spaced Formation comprised of the W½ of subject Section 16 and the E½ of subject Section 18, respectively, with the stipulation of review by the Board as presented by Pioneer and the Division at the commencement of the hearing, are just and reasonable and protective of correlative rights.
- 6. Pioneer has sustained its burden of proof, demonstrated good cause, and satisfied all legal requirements for the granting of its Request for Agency Action.
- 7. The relief granted hereby will result in the orderly development and greatest recovery of gas from the Spaced Formation as to the Subject Lands, prevent waste and adequately protect the correlative rights of all affected parties.

ORDER

Based upon the Request for Agency Action, testimony and evidence submitted, and the findings of fact and conclusions of law stated above, the Board hereby orders:

1. The Request for Agency Action in this cause is granted.

- 2. The Board's Orders entered in Cause Nos. 220-04 and 220-05 insofar and only insofar as they pertain to the W½ of Section 16 and the E½ of Section 18 of Township 12 South, Range 10 East, SLM, respectively, are hereby vacated.
- 3. Temporary 320-acre drilling and spacing units, comprised of said $W\frac{1}{2}$ of Section 16 and $E\frac{1}{2}$ of Section 18, respectively, are hereby established for the production of gas (including coalbed methane) from the Blackhawk formation, defined as:

the stratigraphic equivalent of 4,020 feet below the surface of the earth down to 5,300 feet as measured in the Cockrell Oil 1210-0806 #1 (a/k/a Anadarko Federal 6-8) well located in the SE½NW½ of Section 8, Township 12 South, Range 10 East, SLM, Carbon County, Utah.

Only one well on each such unit producing in said interval is allowed.

4. Subject to Division approval of conforming applications for permit to drill, Pioneer is authorized to horizontally drill the proposed Jensen 2-18 well with a lateral targeting the K2 (Kenilworth) coal seam, and to re-enter and horizontally drill the State 11-16 well with two laterals, one targeting the A1 (Aberdeen) coal seam and the other targeting the K2 (Kenilworth) coal seam, in the manner depicted in Pioneer's Exhibits "N" and "O" admitted into evidence, and each such well is designated as the authorized well for the respective unit established under the preceding paragraph.

- 5. Pioneer is authorized to complete the Huber-Jensen 1-18 well as, and to convert the Huber-State 4-16 well to, an observation well. Neither well is to thereafter produce without further authorization of the Board.
- 6. Pioneer (or its successor if applicable) shall, within one year of the respective dates of completion of the authorized horizontal wells, or at such sooner time as deemed appropriate by the Division, report to the Board regarding the production from such wells such that the continued validity of the drilling and spacing units created hereunder can be evaluated.
- 7. Pursuant to Utah Admin. Code Rule R641 and Utah Code Ann. § 63-46b-6 to 10, the Board has considered and decided this matter as a formal adjudication.
- 8. This Order is based exclusively on evidence of record in the adjudicative proceeding or on facts officially noted, and constitutes the signed written order stating the Board's decision and the reasons for the decision, all as required by the Administrative Procedures Act, Utah Code Ann. § 63-46b-10 and Utah Administrative Code Rule R641-109.
- 9. Notice re: Right to Seek Judicial Review by the Utah Supreme Court or to Request Board Reconsideration: As required by Utah Code Ann. § 63-46b-10(e) to -10(g), the Board hereby notifies all parties in interest that they have the right to seek judicial review of this final Board Order in this formal adjudication by filing a timely

appeal with the Utah Supreme Court within 30 days after the date that this Order issued. Utah Code Ann. § 63-46b-14(3)(a) and - 16. As an alternative to seeking immediate judicial review, and not as a prerequisite to seeking judicial review, the Board also hereby notifies parties that they may elect to request that the Board reconsider this Order, which constitutes a final agency action of the Board. Utah Code Ann. § 63-46b-13, entitled, "Agency Review - Reconsideration," states:

- (1)(a) Within 20 days after the date that an order is issued for which review by the agency or by a superior agency under Section 63-46b-12 is unavailable, and if the order would otherwise constitute final agency action, any party may file a written request for reconsideration with the agency, stating the specific grounds upon which relief is requested.
- (b) Unless otherwise provided by statute, the filing of the request is not a prerequisite for seeking judicial review of the order.
- (2) The request for reconsideration shall be filed with the agency and one copy shall be sent by mail to each party by the person making the request.
- (3)(a) The agency head, or a person designated for that purpose, shall issue a written order granting the request or denying the request.
- (b) If the agency head or the person designated for that purpose does not issue an order within 20 days after the filing of the request, the request for reconsideration shall be considered to be denied.
- Id. The Board also hereby notifies the parties that Utah Admin. Code Rule R641-110-100,

which is part of a group of Board rules entitled, "Rehearing and Modification of Existing Orders," states:

Any person affected by a final order or decision of the Board may file a petition for rehearing. Unless otherwise provided, a petition for rehearing must be filed no later than the 10th day of the month following the date of signing of the final order or decision for which the rehearing is sought. A copy of such petition will be served on each other party to the proceeding no later than the 15th day of the month.

- Id. See Utah Admin. Code Rule R641-110-200 for the required contents of a petition for Rehearing. If there is any conflict between the deadline in Utah Code Ann. § 63-46b-13 and the deadline in Utah Admin. Code Rule R641-110-100 for moving to rehear this matter, the Board hereby rules that the later of the two deadlines shall be available to any party moving to rehear this matter. If the Board later denies a timely petition for rehearing, the party may still seek judicial review of the Order by perfecting a timely appeal with the Utah Supreme Court within 30 days thereafter.
- 10. The Board retains continuing jurisdiction over all the parties and over the subject matter of this cause, except to the extent said jurisdiction may be divested by the filing of a timely appeal to seek judicial review of this order by the Utah Supreme Court.
- 11. For all purposes, the Chairman's signature on a faxed copy of this Order shall be deemed the equivalent of a signed original.

DATED this 18 day of 11, 2005.

STATE OF UTAH BOARD OF OIL, GAS AND MINING

J. James Peacock, Chairman

CERTIFICATE OF SERVICE

I hereby certify that I caused a true and correct copy of the foregoing "Findings of Fact, Conclusions of Law and Order" for Docket No. 2005-006, Cause No. 220-06 to be mailed with postage prepaid, this 23rd day of May, 2005, to the following:

Frederick M. MacDonald PRUITT GUSHEE Attorneys for Pioneer Natural Resources 36 South State Street, Suite 1800 Salt Lake City, UT 84111

Michael S. Johnson Assistant Attorney General Utah Board of Oil, Gas & Mining 1594 West North Temple, Suite 300 Salt Lake City, UT 84116 (Hand Delivered)

Stephen Schwendiman Assistant Attorney General Utah Board of Oil, Gas & Mining 160 East 300 South, 5th Floor P.O. Box 140815 Salt Lake City, UT 84114-0815

Steven F. Alder
Alison D. Garner
Assistant Attorneys General
Utah Division of Oil, Gas & Mining
1594 West North Temple, Suite 300
Salt Lake City, UT 84116
(Hand Delivered)

Pioneer Natural Resources USA, Inc. Attn: Betty Brownson, Landman 1401 17th Street, Suite 1200 Denver, CO 80202

Bureau of Land Management Attn: Terry Catlin P.O. Box 45155 Salt Lake City, UT 84145-0155 Bureau of Land Management Moab Field Office Attn: Eric Jones, Petroleum Engineer 82 East Dogwood Moab, UT 84532

School and Institutional Trust Lands Administration Attn: LaVonne Garrison 675 East 500 South, Suite 500 Salt Lake City, UT 84102-2818

W. Fred Deusinger 12530 Limber Pine Place Cypress, TX 77429

Clifford S. Foss Jr. 13002 Apple Tree, Suite 4600 Houston, TX 77079

Daniel F. Gayle 14026 Court of Regents Houston, TX 77069

Milton T. Graves 1421 Potomac Houston, TX 77057

Feldor H. Hoolenshead 16614 Cougar Falls Court Spring, TX 77379

Charles W. Hubbard 13706 Lost Creek Road Tomball, TX 77375 J. M. Huber Corporation 1050 17th Street, Suite 800 Denver, CO 80265

Robert W. Kelsey 5464 Fieldwod Drive Houston, TX 77056

Patina Oil & Gas Corporation 1625 Broadway, Suite 2000 Denver, CO 80202

Carol C. Jennings Texas Trust 1000 Main, Suite 3250 Houston, TX 77002

Ernest H. Cockrell Texas Trust 1000 Main Street, Suite 3250 Houston, TX 77002-6307

Bernard E. Weichman 22528 Magnolia Hills Drive Magnolia, TX 77354

Park Ventures, a Limited Partnership c/o Reed L. Martineau c/o Snow, Christensen & Martineau P.O. Box 45000 Salt Lake City, UT 84140

Paul F. Moynier, Jr. 205 East 900 North Price, UT 84501

Pierre A. Moynier III 555 Park Drive Price, UT 84501 Melanie M. Dent 1712 E. Morelos Street Chandler, AZ 85225

Lee P. Moynier, Jr. 665 South 100 East P.O. Box 634 Wellington, UT 84542

Amanda Moynier 665 South 100 East P.O. Box 634 Welllington, UT 84542

James T. Jensen 2961 E. Caitland Ct. Salt Lake City, UT 84121

Jerry J. Jensen 1155 N. Carbonville Road Price, UT 84501

Dix Jensen P.O. Box 1736 Price, UT 84501

RFJ Enterprises, LLC 1155 N. Carbonville Road Price, UT 84501

Edward F. Bates as Trustee of the Overriding Royalty Trust c/o Stayner & Company LLC P.O. Box 2995 Salt Lake City, UT 84110-2995

Clint W. Turner and Camille Turner 8438 S. 1275 East Sandy, UT 84094